

1. **I am working on a 4 story apartment building with main level will be commercial, in Lincoln. Lincoln may not have 2018 IECC approved by July 1. Do I still need to use 2018 IECC for this project? I am a registered architect in NE. Thanks.**

Yes, the Implementation Date for the code is referenced in Statute and cannot be modified.

2. **When lighting and power provisions apply - how does the 'existing lighting system that is altered' work with the NE statute of the 50% replacement cost?**

If you are talking about alterations to a lighting system in an existing building you would only have to meet the 2018 IECC requirements if it is not a state-owned or state-funded building and the cost of the alterations exceed the 50% replacement cost of the building. If you are working on an addition to an existing building and no alterations are being made to the lighting in the existing building the code doesn't apply to anything associated with the existing building. Lighting power and connected lighting power calculations would only relate to the new addition.

3. **On the 50% of the replacement cost of a building, applicability of the code, does this also apply to State owned buildings?**

No. State-owned and state-funded buildings fall under a separate statute that does not include the 50% exclusion.

4. **Is there any push to remove the "50% replacement cost" exception? I'm often frustrated by clients that will "play games" to avoid energy code compliance, and that exception is quite broad.**

None that I am aware of.

5. **Occupancy sensor in mechanical rooms where persons may be shielded from the sensor and working on equipment?**

Mechanical rooms are not specifically included in the list of spaces where Occupant Sensor Controls are required unless the room might fall under the "*≤300 sq. ft. enclosed by floor-to-ceiling height partitions.*" In that case I would control the lighting in that room (for safety reasons) with an appropriate Time Switch Control that would allow the lights to remain on for not more than 2 hours.

6. **Are corridors allowed to have only occupancy sensors without switches?**

Corridors are not excluded from controlling lighting with Occupant Sensor Controls but it isn't a requirement, **but** in **Section C405.2.1.1 Occupancy Sensor Control Function** it requires that controls comply with the following:

1. They automatically turn off the lights within 20 minutes after all of the occupants have left the space,
2. They shall be manual on or controlled to automatically turn on lighting to not more than 50% power (full on is specifically allowed for public corridors), and
3. *A manual control is incorporated to allow occupants to turn off lights.*

7. **Does the code ever differentiate the orientation of the building? i.e. when talking of Daylight Zones... those calculations are the same regardless if openings are on a North wall or on a West wall, correct?**

The requirements for daylight zones (toplit or sidelit) make no reference to orientation of the building or cardinal directions. Although that would be accounted for if the Building Simulation

Compliance Option was utilized. But, there are requirements regarding direction (or cardinal direction) associated with daylight zone controls.

8. Will we have access to the slideshow?

Yes, the slide show will be available on the NDEE website <http://dee.ne.gov/> by searching "Video Events"

9. If I have occupancy sensors in a corridor, do I also have to have a local switch?

See answer to #6

10. Daylight responsive - Not manual control only? It has to have a photosensor to automatically adjust the output?

The definition of *Daylight Responsive Control* provided in the code indicates "A device or system that provides automatic control of electric light levels based on the amount of daylight in a space." While the definition of *Automatic* indicates "Self-acting, operating by its own mechanism when actuated by some impersonal influence....." Based on these definitions, I do not believe that installing manual controls would meet the Lighting Reduction requirements of the 2018 IECC.

11. Architects are putting short windows up at 6'6" so it seems the daylight zone would not start until 6'6" in room and probably farther than 15'. It is a dilemma for the designer when the code does not really work for a particular situation.

As written, the 2018 IECC only uses the height of the top of the window to calculate the sidelit daylight zone for a specific area of room and the height of the bottom of the window does not impact the zone. Although there may be less "direct" daylight on surfaces in these space, the lighting designer does need to include the entire area in their controls calculations.

12. For exterior lighting control requirements - isn't the time switch required to be astronomical?

The code doesn't really reference *astronomical* in the requirements established in the Sections **(C405.2.6 and C405.2.6.4)** that cover Exterior Controls and/or Functions and it isn't covered in the *Definitions*. I would suggest that this might be more of a terminology issue than anything else, but if an astronomical timer is able to satisfy all of the additional requirements of the timing and functions Sections of the code I am sure that it would be considered an acceptable control option.

13. C405.2.6.3: Lighting Setback - do the controls need to comply with all 3 requirements or just 1 of the 3?

The Section references "reduced by not less than 30% by selectively switching off or dimming luminaries at one of the following times:"

14. Can the design professional who does the functional testing be the same design professional who designed the lighting controls?

As per **Section C408.3.1** "the registered design professional shall provide evidence that the lighting control systems have been tested to ensure that control hardware and software are calibrated, adjusted, programmed and in proper working condition...." Indicating that the commissioning verification would need to be completed, or approved, by the registered design professional that designed the system.

- 15. Functional Testing of lighting controls - can this be done by the registered professional that designed the system or does it have to be an independent agency? Is the manufacturer allowed to do this?**

See answer to #14